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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,939	10/29/1999	MICHEL AUTHIER		6547

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EXAMINER	
PRUNNER, KATHLEEN J	
ART UNIT	**PAPER NUMBER**
3751	25

DATE MAILED: 10/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/429,939	AUTHIER ET AL.	
	Examiner	Art Unit	
	Kathleen J. Prunner	3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *26-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *26-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Prosecution Application

1. The request filed on August 26, 2003 (Paper No. 23) for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/429,939 is acceptable and a CPA has been established. An action on the CPA follows.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed terminology. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The claimed terminology which lacks such antecedent basis is as follows: (**A**) a computer that "automatically selectively activates and deactivates said at least one pump . . . so that the temperature of the water inside said spa and spa piping is maintained above the freezing level", as called for by claim 26; (**B**) a computer that "automatically selectively activates and deactivates said at least one pump based upon inputs from said second sensor", as called for by claim 26; (**C**) a computer that "automatically selectively activates and deactivates said at least one air blower (means) and said at least one water pump (means) . . . so that the temperature of the water inside said spa tub and said spa piping is maintained above the freezing level", as called for by claims 32 and 38; and (**D**) a computer that "automatically selectively activates and deactivates said at least one air blower (means) and said at least one water pump (means) based upon inputs from said second sensor", as called for by claims 32 and 38. Correction is required.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 26-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tompkins et al. ('720) in view of Dundas. Tompkins et al. disclose a freeze control system for a spa having a spa tub or container 11 for holding water, spa piping 35 for circulating water to and from the spa tub 11, a heating element 26 for heating the water, a pump 24 for pumping water, a temperature sensor 21 for detecting the temperature of the water in the spa tub 11, and a computer 10 programmed to automatically process signals and selectively activates and deactivates the heating element 26, blower 28 and the pump 24 (note lines 50-55 in col. 1 and from line 66 in col. 18 to line 36 in col. 19). Although Tompkins et al. fail to disclose the use of an air temperature sensor and although Tompkins et al. use water temperature sensor 21 as well as other water sensors to operate the freeze control system, attention is directed to Dundas who discloses another freeze control system for a spa or pool that uses both a water temperature sensor and an ambient air temperature sensor to activate the control system (note lines 54-57 in col. 1 and lines 16-33 in col. 2) in order to heat the pool using minimal energy with less waste and expense (note lines 15-19 and 35-37 in col. 1). It would have been obvious to one of ordinary skill in the spa/pool art, at the time the invention was made, to use an ambient air temperature sensor in conjunction with the water temperature sensor in the control system of Tompkins et al. in view of the teachings of Dundas in order to more effectively operate the control system using minimal energy and less waste and expense. With respect to claims 27 and 33, the positioning of the ambient air temperature sensor is considered to be an obvious expedient to the skilled artisan since to obtain an accurate ambient air temperature reading, the ambient air temperature sensor should necessarily be mounted so as to be unaffected by any apparatus that emits heat including that of the components of the control system. With regard to claims 28, 29, 34 and

35, it is considered that to position the ambient air temperature sensor closer to the spa equipment where it can be affected by the heat generated by the operating and control systems of the spa/pool and to have the computer make the required correction factors to account for this heat would be an obvious expedient to the skilled artisan especially when available space is limited and accurate readings are key to the efficient operation of the spa. With regard to claims 31 and 37, although it is considered that the predetermined time period necessary to effect operation of the pump is an obvious expedient to the skilled artisan, to use a predetermined time period of one minute to effect operation of the pump is simply the result of optimization of the prior art teachings through routine experimentation, which is not a matter of invention, absent a showing to the contrary (see *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA) 1955), and *In re Hoeschele*, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969). With respect to claims 32 and 38, Tompkins et al. further disclose an air blower 28 for blowing air into the spa tub 11.

Response to Arguments

5. Applicant's arguments filed August 26, 2003 (Paper No. 24) have been fully considered but they are not deemed persuasive.

6. In response to applicant's arguments with regard to the former rejection of the claims under 35 U.S.C. 112, first paragraph, and to the present objection to the specification, it is pointed out that 37 CFR 1.75(d)(1) specifically states "The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description". Since the terms and phrases used in the claims, as noted above, are not in the specification, this objection to the specification is indeed proper.

7. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations

of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

8. In response to applicant's argument that the Dundas reference does not show or suggest that the ambient air sensor can be used for automatic freeze control, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

9. In response to applicant's arguments regarding the Dundas reference, it is pointed out that the Dundas reference does indeed describe an automatic control using the ambient air temperature to activate the control system of a pump (note lines 16-33 in col. 2). The Dundas reference also discloses using the system during freezing weather (note lines 22-25 in col. 4), which is exactly what the Tompkins et al. reference and its control system is also concerned with. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the teaching, suggestion, or motivation to use an ambient temperature sensor in a spa/pool control system is found in the references themselves, as clearly pointed out in the above rejection of the claims.

Conclusion

10. All claims are drawn to the same invention claimed in the parent application prior to the filing of this Continued Prosecution Application under 37 CFR 1.53(d) and could have been finally rejected on the grounds and art of record in the next Office action. Accordingly, **THIS ACTION**

IS MADE FINAL even though it is a first action after the filing under 37 CFR 1.53(d). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication from the examiner should be directed to Examiner Kathleen J. Prunner whose telephone number is 703-306-9044. The examiner can usually be reached Monday through Friday from 5:30 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory L. Huson, can be reached on 703-308-2580.

The Official FAX phone number for the organization where this application is assigned is: 703-872-9306. This FAX is located in Crystal Mall, Building 1, which is some distance away from the examiner's location in Crystal Park, Building 1. Hence, the examiner has no immediate access to faxes.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703-308-0861.

Kathleen J. Prunner:kjp

October 9, 2003

GREGORY HUSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700